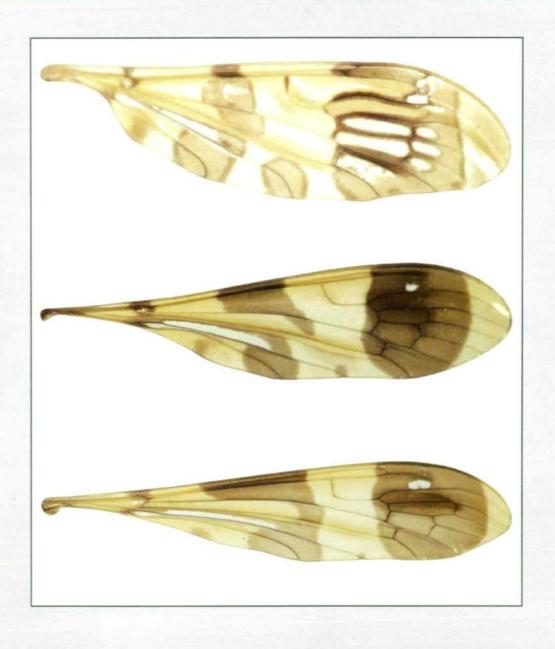
The Limoniinae (Diptera: Tipulidae) of Australia

Part IV and V

G. Theischinger



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The Limoniinae (Diptera: Tipulidae) of Australia

IV. New and insufficiently known species of Gynoplistia MACQUART and Molophilus CURTIS (Diptera: Tipulidae: Limoniinae) from Australia

V. The genera Helius Le Peletier & Serville, Toxorhina Loew, Limonia Meigen (part), Tonnoiromyia Alexander and Collessophila gen. nov. (all tribe Limoniini) and Atarba Osten-Sacken, Amphineurus Skuse, Erioptera Meigen, Cheilotrichia Rossi, Gonomyia Meigen and Idiocera Dale (all tribe Eriopterini)

G. THEISCHINGER

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The Limoniinae (Diptera: Tipulidae) of Australia IV. New and insufficiently known species of *Gynoplistia* MACQUART and *Molophilus* CURTIS (Diptera: Tipulidae: Limoniinae) from Australia

G. THEISCHINGER

A b s t r a c t: Three species of *Gynoplistia* MACQUART and 30 species of *Molophilus* CURTIS from Australia are described as new. New information is provided on several little-known species of these genera.

Introduction

The Australian species of *Molophilus* CURTIS and *Gynoplistia* MACQUART were revised recently (THEISCHINGER 1992b, 1993). This is the first attempt to update both revisions. Largely, the methods used in the revisions and outlined by THEISCHINGER (1992a) are also followed in this paper.

Acknowledgements

For supplying material and relevant information and for support in the field, I wish to thank the following people: Prof. Dr R.L. Kitching, Dr G. Monteith (Brisbane); Dr D.H. Colless, Dr P. Cranston, Dr T. Edwards, Dr M. Horak, Dr E.S. Nielsen, Dr K.R. Norris, Dr D.C.F. Rentz, Mr T. Weir, Dr A. Wells (Canberra); Dr P.B. McQuillan (Hobart); Dr D. Bickel (Sydney); Dr N.L. Evenhuis (Honolulu, U.S.A.); Univ.-Doz. Dr. F. Speta (Linz, Austria); Mr B. Upjohn (Uralla); Prof. Dr. P. and Dr. H. Zwick (Schlitz, Germany).

Genus Gynoplistia MACQUART

Synonymy as in THEISCHINGER (1993).

Subgenus Gynoplistia MACQUART

Synonymy as in THEISCHINGER (1993).

Gynoplistia (Gynoplistia) alice group

Gynoplistia (Gynoplistia) alice group, sensu THEISCHINGER (1993).

Gynoplistia (Gynoplistia) weiri spec. nov. (Fig. 1)

Description: Head largely orange; palps greyish brown, basal joint, particularly in female, markedly paler than the rest. Antennae with scape, pedicel and most of bases of more proximal flagellomeres yellow, flabella and simple distal segments largely brownish black; 16 segmented; formula 2+2+7+5 in male, 2+2+6+6 in female. Thorax blackish brown except for anterior rim of pronotum and lateral cervical sclerites which are largely greyish yellow. Coxae blackish brown; trochanters of male brown, of female grevish yellow; pro- and metafemur of male and mesofemur of female grevish yellow with apex black, metafemur of female black; pro- and metatibia and tarsi of male yellowish grey with apex blackened, and claws black; meso- and metatibia of female black, tarsi and claws largely black, only basitarsi largely greyish yellow; other leg segments missing. Wings subhyaline with large black patches at arculus, origin of Rs, anterior cord and near end of A2, in cells CuA and A1. Halteres with stem grevish brown and knob greyish black. Abdomen black, with anterior 1/2 of segment 3 and 4 in male and anterior 1/2 of segment 3 and anterior 1/3 of segment 4 in female pale yellow; tergite 10, much of sternite 8, cerci and hypogynial valves of female pale orange.

D i m e n s i o n s: Wing length, male 5,8 mm, female 6,2-6,3 mm.

Genitalia: Male hypopygium, Fig. 1.

R e m a r k s: This is the second member of the G. (G.) alice group of THEISCHINGER (1993); similar to G. alice THEI. It is now clear that the female from Heathlands, Queensland, recorded under G. alice by THEISCHINGER (1993), belongs to G. weiri, and that accordingly G. alice is known only from Northern Territory. Diagnostic characters (male): tergite 9 with posterior median point; mesal lobe of gonocoxite small and rather straight; side branch of gonostylus very small.

Material examined: Holotype & : Queensland, 10°55'S/142°22'E, Burster Creek, 17.10.1992, at light, P. Zborowski and T. Weir (ANIC). Paratypes: Queensland: 1 \(\rho_1 \), same data as holotype (ANIC); 1 \(\rho_1 \), 11°45'S/142°35'E, Heathlands, 15-26.1.1992, I. Naumann and T. Weir (ANIC); 1 \(\rho_1 \), same locality, 5.4.-23.5., malaise trap, P. Zborowski and A. Roach (ANIC).

Distribution: Queensland (CY).

N a m e: Dedication to Mr T. Weir of Canberra who collected part of the material.

Gynoplistia (Gynoplistia) aurantiocincta group

Gynoplistia (Gynoplistia) aurantiocincta group, sensu THEISCHINGER (1993).

Gynoplistia (Gynoplistia) tigris spec. nov. (Fig. 2)

Description: Head of male missing. Head of female shiny black on top, with frons, genae and rostrum pale brownish yellow; palps dark grevish-brown. Antennae of female with scape, pedicel and much of basal flagellomeres brownish yellow, more distal segments and flabella dark greyish brown; 16 segmented; formula 2+2+6+6. Prothorax brownish yellow, darker in male than in female; synthorax largely shiny brownish- to bluish black. Coxae pale greyish brown in female, dark greyish brown in male; trochanters largely brownish yellow; femora yellow with distal 1/7-1/5 black; pro- and mesotibia greyish brown, in male with indication of a paler ring at about midlength; metatibia brownish black with broad white ring at about midlength; tarsi and claws black. Wings hyaline with cells C and Sc brown and with large brownish black patches adjacent to arculus, at origin of Rs and in cord area including crossvein bscu and proximal and distal border of cell dm; wing apex broadly and distinctly darkened; less distinct dark patches in cells CuA and A1 and along vein A2. Halteres with stem pale yellow; knob very dark in male, largely pale in female. Abdomen of male largely shiny black with anterior 1/2 of segment 3 and anterior 1/4-1/3 of segment 4 pale brownish yellow; abdomen of female much as in male but pale rings of segments 3 and 4 narrower and yellowish white, and terminal segments including cerci and hypogynial valves brownish yellow.

D i m e n s i o n s: Wing length, male 6,7 mm, female 7,4 mm.

Genitalia: Male hypopygium, Fig. 2.

Remarks: G. tigris is considered a member of the G. (G.) aurantiocincta group. Diagnostic characters (male): tergite 9 with well separated small posterolateral lobes; aedeagal complex with only two lateral elements (possibly including interbase); aedeagus a wide, winged structure.

Material examined: Holotype &: Queensland, 15°03'S/145°09'E, 2 km NE of Mt Webb, malaise trap, 2.5.1981, D.H. Colless (ANIC). Paratype: 1♀, Queensland, 17°05'S/145°38'E, E of Mount Edith, 800 m, rainforest creek, malaise trap, 22-27.4.1994, B. Sinclair (GT).

Distribution: Queensland (CY, NEQ).

N a m e: Tigris (= Latin for "tiger") refers to the black and yellow ringed abdomen; to be treated as a noun in apposition to the generic name.

Gynoplistia (Gynoplistia) fumipennis group

Gynoplistia (Gynoplistia) fumipennis group, sensu Theischinger (1993).

Gynoplistia (Gynoplistia) variabilis pammelas ALEXANDER, comb. nov.

Gynoplistia (Gynoplistia) pammelas ALEXANDER, Proc. Linn. Soc. N.S.W. 53: 67 (1928).

Gynoplistia (Gynoplistia) fumipennis pammelas ALEXANDER; THEISCHINGER, Stapfia 29: 32 (1993).

Description of male: Head black; mouth parts blackish brown. Antennae with scape and pedicel black, flagellum blackish brown; 17 segmented; formula 2+2+9+4. Thorax black; pleura with some pruinescence. Coxae and trochanters black; femora largely dark yellow, apical 1/4 of pro- and mesofemur and apical 1/5 of metafemur black; pro- and mesotibia black, metatibia yellow with extreme base and apical 1/5 black; tarsi and claws black. Wings 6,5 mm long; largely suffused with pale grey, base pale orange; a greyish black patch each, at origin of Rs and along anterior cord. Halteres with stem yellow and knob whitish yellow. Abdomen black.

G e n i t a l i a : Male hypopygium much as in G. v. variabilis ALEX.

R e m a r k s: Gynoplistia pammelas, previously known only from female, was considered to be a subspecies of Gynoplistia fumipennis WALKER by THEISCHINGER (1993). However, recently a female of G. pammelas and a male of G. variabilis ALEX. were collected in copula near Ebor Falls. This and the fact that hitherto only males of G. variabilis, but not of G. fumipennis, and only females of G. pammelas have been collected in north-eastern New South Wales, suggest that G. pammelas should be regarded as the northern subspecies of G. variablis. Diagnostic characters: femora of male bicolored (black and yellow) as in typical G. variabilis, femora of female black.

Material examined: 13, 19 (in copula): New South Wales, Ebor Falls, 14.11.1992, G. Theischinger and F. Speta (GT).

Gynoplistia (Gynoplistia) howensis group

Insufficiently clarified species of Gynoplistia (Gynoplistia), sensu THEISCHINGER (1993), in part.

Gynoplistia (Gynoplistia) howensis SKUSE (Fig. 3)

Gynoplistia howensis SKUSE, Proc. Linn. Soc. N.S.W. 4: 872 (1890).

Gynoplistia (Gynoplistia) howensis SKUSE; THEISCHINGER, Stapfia 29: 72 (1993).

Description of male: Corresponds well with the description presented of the female by SKUSE (1890) and repeated by THEISCHINGER (1993). The antennae are 17 segmented, the formula being 2+2+10+3. The wings are 11,3 mm long.

Genitalia: Hypopygium, Fig. 3.

Remarks: G. howensis was listed under "Insufficiently clarified species of Gynoplistia (Gynoplistia)" by THEISCHINGER (1993) because the male was at that time still unknown. As can be seen from Fig. 3, the male hypopygium of G. howensis does not fit any of the species groups established for the Australian species by THEISCHINGER (1993). On the evidence now available, G. howensis has to be regarded as an isolated species [G. (G.) howensis group] in Australia. Affinities with extralimital species cannot be assessed at the present.

Material examined: 1♂, 1♀ (in copula): New South Wales, Lord Howe Island, 31°36'S/159°05'E, near Big Hill Saddle, Mount Gower, ca 420 m, Stop LH-9, 9.12.1988, D.C.F. Rentz (ANIC).

Insufficiently clarified species of Gynoplistia (Gynoplistia)

Insufficiently clarified species of Gynoplistia (Gynoplistia), sensu THEISCHINGER (1993).

Gynoplistia (Gynoplistia) collessi spec. nov.

Description (φ): Head largely black, rostrum laterally brown; antennae 17 segmented, formula 2+2+8+5, largely blackish brown, only scape, pedicel and base of first two flagellar segments brownish yellow. Thorax brownish black. Coxae and trochanters blackish brown; pro- and mesofemur dark yellow, metafemur black with basal 1/3 and apical 1/6 yellow; pro- and mesotibia from yellowish brown to black, metatibia dark yellow with apex black; tarsi yellowish brown to black, claws black. Wings largely suffused with greyish brown, base dull yellow, pterostigma dark greyish brown. Halteres with stem brown and knob blackish brown. Abdomen largely blackish

brown to black; an ill- defined whitish ring each, in anterior portion of segments 2 and 3; tergite 10, part of sternite 8, cerci and hypogynial valves dark yellow.

Dimensions: Wing length 8,7 mm.

Male unknown.

R e m a r k s: Not very similar to any other described Australian species. Diagnostic characters: particular colouration of legs, wings and abdomen as described above.

Material examined: Holotype q: Queensland, 15°50'S/145°20'E, Gap Creek, 5 km ESE Mt Finnigan, malaise trap, 14.5.1981, D.H. Colless (ANIC).

Distribution: Queensland (CY); known only from type locality.

N a m e: Dedication to Dr D.H. Colless of Canberra, former curator of Diptera in the ANIC, who collected the material.

Genus Molophilus CURTIS

Synonymy as in THEISCHINGER (1992b).

Subgenus Austromolophilus THEISCHINGER

Synonymy as in THEISCHINGER (1992b).

Molophilus (Austromolophilus) laoonana spec. nov. (Fig. 4)

Description (3): Colouration largely greyish brown; katepisternum with distinct greyish yellow patch. Head dark grey; antennae with scape greyish yellow, pedicel and flagellum brownish grey. Coxae and trochanters greyish yellow; femora greyish yellow to pale greyish brown with apex darkened; tibiae greyish brown with apex slightly darkened, only protibia additionally with dark subbasal ring; tarsi and claws blackish brown. Wings slightly suffused with greyish brown, along CuA and cord somewhat darker. Halteres with stem greyish brown and knob pale greyish yellow.

D i m e n s i o n s : Wing length 3,8-3,9 mm.

Genitalia: Hypopygium, Fig. 4.

Female unknown.

Remarks: Most similar to, but coexisting in places with, M. diversistylus ALEX. Diagnostic characters (male): inner branch of inner gonostylus leaf-shaped, smooth, the long, pointed apex bent dorsally at an angle of about 90°.

Material examined: Holotype δ : Tasmania, Patons Road, S of Lemonthyme, 14.2.1994, G. Theischinger (ANIC). Paratype: 1δ , same data as holotype (GT).

Distribution: Tasmania; known only from type locality.

N a m e : Laoonana is a Tasmanian Aboriginal word for "Tasmanian Tiger"; it refers to the bicolored pleura.

Molophilus (Austromolophilus) kitchingi spec. nov. (Fig. 5)

Description: Head largely greyish brown, including rostrum and palps; along eye margin pale greyish yellow; scape and pedicel greyish yellow, flagellum somewhat darker. Prescutum greyish- to brownish yellow with anterior and lateral margins greyish brown; postscutum, scutellum, mediotergite and laterotergite greyish brown; pleura largely pale greyish brown with pale greyish yellow patch across part of anepisternum and katepisternum; a pale greyish yellow patch between terga and pleura in front of wing base, including dorsal edge of pleural sclerites. Coxae and trochanters greyish yellow; femora greyish yellow with apex dark greyish brown; tibiae dark greyish yellow with base and particularly apex markedly darkened; basal tarsal segment greyish yellow passing into greyish brown, other tarsal segments greyish brown. Wing venation largely greyish brown; membrane hyaline, suffused with greyish yellow, cord area and a patch about halfway between wing base and cord indistinctly clouded with greyish brown. Halteres with pale grey stem and pale greyish yellow knob. Abdomen pale greyish brown.

Dimensions: Wing length, male 2,2-3,6 mm, female 3,4-3,8 mm.

Genitalia: Male hypopygium, Fig. 5.

Remarks: Very similar to *M. burraganee* THEL, similar to many other Australian species. Diagnostic characters (male): branches of inner gonostylus long, thin, strongly curved; apex of outer gonostylus simple but markedly expanded.

Material examined: Holotype &: Queensland, Lamington National Park, Green Mountain, Earthwatch Australia (ANIC). Paratypes: 13&&, 16&, same data as holotype (ANIC, GT).

Distribution: Queensland (SEQ); known only from Green Mountain.

Name: Dedication to Prof. Dr. R.L. Kitching of Brisbane, head of several Earthwatch expeditions in Australia.

Molophilus (Austromolophilus) kulai spec. nov. (Fig. 6)

Description: Colouration largely yellowish grey to greyish brown. Head largely grey; antennae yellowish grey, scape somewhat paler than the rest. Coxae and trochanters yellowish grey; other leg segments missing. Wings suffused with greyish brown,

darkened narrowly along CuA. Halteres with stem pale greyish brown and knob greyish white.

D i m e n s i o n s : Wing length, male 2,6-3,3 mm, female 3,0-3,6 mm.

Genitalia: Male hypopygium, Fig. 6.

Remarks: Very close to *M. uncinatus* THEI. Diagnostic characters (male): inner branch of inner gonostylus at least double-branched, often with several branches, never simple.

Material examined: Holotype ♂: Queensland, Bellenden Ker Range, Summit TV Stn, 1560 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (QM). Paratypes: Queensland: 2♂♂, 2♀♀, same data as holotype (ANIC, UQ); 1♂, Bellenden Ker Range, Cable Tower 3, 1054 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (UQ).

Distribution: Queensland (NEQ); known only from Bellenden Ker Range.

N a m e: Kulai is an Australian Aboriginal word for "echidna"; it refers to the spiny outer branch of the inner gonostylus.

Molophilus (Austromolophilus) ngernka spec. nov. (Fig. 7)

Description (3): Colouration largely greyish yellow to greyish brown. Head greyish yellow; antennae brownish yellow. Coxae and trochanters pale greyish yellow; other leg segments missing. Wings suffused with yellowish grey, somewhat darker clouds along cord and CuA. Halteres pale yellowish grey.

Dimensions: Wing length 3,0-3,2 mm.

Genitalia: Hypopygium, Fig. 7.

Female unknown.

Remarks: Similar to *M. echidna* THEI. Diagnostic characters (male): both branches of inner gonostylus hairy; inner branch strongly S- to Z-curved, outer branch with apex simple.

Material examined: Holotype 3: Queensland, Bellenden Ker Range, 1 km S of Cable Tower 6, 500 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (QM). Paratypes: 233, same data as holotype (ANIC, UQ).

Distribution: Queensland (NEQ); known only from type locality.

N a m e: Ngernka is an Australian Aboriginal word for "beard"; it refers to the beardy appearance of both branches of the inner gonostylus.

Molophilus (Austromolophilus) nglaive spec. nov. (Fig. 8)

Description (3): Colouration largely greyish brown to brownish black. Head blackish grey; antennae yellowish- to greyish brown. Coxae black; trochanters yellowish brown; remainder of legs largely greyish brown; an ill-defined ring beyond 2/3 length, and apex of femora blackish brown, in between dull yellow; tarsi and claws blackish brown. Wings suffused with brownish grey, along cord somewhat darker. Halteres with stem pale greyish brown and knob dull yellow.

Dimensions: Wing length 3,9 mm.

Genitalia: Hypopygium, Fig. 8.

Female unknown.

R e m a r k s: Similar to M. dindi THEI. Diagnostic characters (male): outer branch of inner gonostylus a slender, almost symmetrical blade, the short apex hairy; inner branch slim, pointed, slightly bent medially at about midlength.

Material examined: Holotype &: New South Wales, Hornsby, light trap, 6.10.1956, D.J. Lee (ANIC).

Distribution: New South Wales (SEN); known only from the type locality.

N a m e : Nglaiye is an Australian Aboriginal word for "grass tree"; it refers to the appearance of the outer branch of the inner gonostylus.

Molophilus (Austromolophilus) spetai spec. nov. (Fig. 9)

Description (δ): Colouration largely brownish- to blackish grey. Head greyish black; antennae greyish brown. Coxae and trochanters greyish yellow; remainder of legs largely greyish yellow to greyish brown; apical portion of femora and tibiae, basal portion of protibia and terminal four tarsal segments slightly more darkened than the rest. Wings suffused with greyish brown, markedly darker along CuA. Halteres whitish grey.

Dimensions: Wing length 3,6-3,8 mm.

Genitalia: Hypopygium, Fig. 9.

Female unknown.

R e m a r k s: Most similar to *M. mattfulleri* THEI. Diagnostic characters (male): outer branch of inner gonostylus strongly arched, with small tooth at about 1/3 length; outer gonostylus with apex rather simple, rounded.

Material examined: Holotype δ : New South Wales, on the way from Barockee area to Cathedral Rock, 13.11.1992, G. Theischinger (ANIC). Paratypes: $2\delta \delta$, same data as holotype (GT).

Distribution: New South Wales (NEN); known only from type locality.

Name: Dedication to Univ.-Doz. Dr. F. Speta of Linz (Austria) who assisted in collecting tipulids in Australia.

Molophilus (Austromolophilus) wieseri spec. nov. (Fig. 10)

Description (3): Colouration largely brownish yellow to greyish brown. Head yellow and greyish brown; antennae largely greyish brown. Coxae and trochanters dull yellow; remainder of legs largely dull yellow; apex of femora and tibiae and a subbasal ring in protibia brownish black; an ill-defined ring at about 2/3 length of metafemur, most of tarsi, and claws, greyish brown. Wings suffused with yellowish grey, somewhat darker clouds at origion of Rs and along cord. Halteres with stem yellowish grey and knob whitish yellow.

Dimensions: Wing length 4,5 mm.

Genitalia: Hypopygium, Fig. 10.

Female unknown.

Remarks: Most similar to *M. subasper* ALEX. Diagnostic characters (male): outer branch of inner gonostylus with thumb-shaped process beyond midlength and with distal portion wide and toothed.

Material examined: Holotype &: Victoria, Goonmark Rocks, Scenic Reserve, 16.1.1991, G. Theischinger (ANIC).

Distribution: Victoria; known only from type locality.

N a m e: In honour of my late biology teacher, Prof. Dr. F. Wieser of Linz (Austria).

Subgenus Molophilus CURTIS

Synonymy as in THEISCHINGER (1992b).

Molophilus (Molophilus) gracilis group

Molophilus (Molophilus) gracilis group, sensu Theischinger (1992b).

Molophilus (Molophilus) berberus spec. nov. (Fig. 11)

Description: Colouration largely greyish- to dull reddish- and blackish brown. Head blackish grey; antennae greyish brown. Legs greyish- to dull reddish- and

blackish brown. Wings strongly suffused with brown. Halteres with stem pale brown and knob pale greyish yellow.

Dimensions: Wing length, male 5,7-6,0 mm, female 5,9-6,1 mm.

Genitalia: Male hypopygium, Fig. 11. Female with cerci and hypogynial valves long and thin, the cerci evenly curved dorsally.

R e m a r k s: Most similar to *M. cerberus* ALEX. Diagnostic characters (male): inner gonostylus strongly S-curved, with base long; outer gonostylus markedly enlarged subapically.

Material examined: Holotype ♂: Tasmania, Pelion Hut, malaise 2, 30.11.1990-8.1.1991, Nielsen/Edwards (ANIC). Paratypes: 2♂♂, 2♀♀, same data as holotype (ANIC, GT).

Distribution: Tasmania; known only from type locality.

N a m e: Berberus is an arbitrary combination of letters, made up in order to indicate the close affinity with *M. cerberus* ALEX.; to be treated as a noun in apposition.

Molophilus (Molophilus) drepanostylus ALEXANDER (Fig. 12)

Molophilus drepanostylus ALEXANDER, Proc. Linn. Soc. N.S.W. 59: 182 (1934).

Molophilus (Molophilus) drepanostylus ALEXANDER; THEISCHINGER, Stapfia 27: 32 (1992b).

Genitalia: Male hypoppygium, Fig. 12.

Remarks: *M. drepanostylus* was one of the few species revised, of which fresh material was not available to THEISCHINGER (1992b) for the illustration of the male hypopygium. Fig. 12 should fill this gap and facilitate identification.

Material examined: 13: New South Wales, 20 mi. Glen Innes to Grafton H'way, 20.4.1970, D.H. Colless (ANIC).

Molophilus (Molophilus) eurygramma ALEXANDER (Fig. 13)

Molophilus eurygramma ALEXANDER, Ann. Mag. nat. Hist. (10) 3: 332 (1929).

Molophilus (Molophilus) eurygramma ALEXANDER; THEISCHINGER, Stapfia 27: 71 (1992b).

Description of male: Corresponds well with the description given of the female by ALEXANDER (1929) and repeated by THEISCHINGER (1992b). The wings are 5,2 mm long.

Genitalia: Hypopygium, Fig. 13.

Remarks: M. eurygramma was included in the M. plagiatus group, annulipes subgroup, by ALEXANDER (1929) and treated with those species by THEISCHINGER

(1992b). Fig. 13, however, shows that *M. eurygramma* is most similar to *M. iluka* THEI. which was included in the *M. gracilis* group by THEISCHINGER (1992b).

Material examined: 2δδ, 11φφ: Queensland, Lamington N.P., Green Mtn, Earthwatch Australia (ANIC).

Molophilus (Molophilus) iyouta spec. nov. (Fig. 14)

Description: Colouration largely yellowish- to greyish brown. Head largely dark brownish grey; antennae pale to dark greyish brown. Coxae and trochanters greyish yellow; femora and tibiae greyish yellow with apex darkened, additionally a black subbasal ring in protibia of male; tarsi and claws from pale greyish brown to black. Wings suffused with pale yellowish grey, darker along cord. Halteres with stem pale greyish yellow and knob almost white.

D i m e n s i o n s: Wing length, male 6,2-6,8 mm, female 6,4-7,5 mm.

Genitalia: Male hypopygium, Fig. 14.

Remarks: Similar to M. subalpicola ALEX. and M. trispinosus THEI. Diagnostic characters (male): gonocoxite with dorsal lobe rather extensive; inner gonostylus with well defined subapical dorsal tooth or pair of teeth.

Material examined: Holotype &: New South Wales, between Perisher Creek and Smiggins, 1530-1650 m, 2.12.1992, G. Theischinger (ANIC). Paratypes: New South Wales: 8& &, 1♀, same data as holotype (GT); 1&, 1♀, N of Schlink Pass, 1500 m, 2.12.1992, G. Theischinger (GT).

Distribution: New South Wales (SEN); known only from Snowy Mountains.

N a m e: Iyouta is an Australian Aboriginal word for "spinifex"; it refers to the spiny inner gonostylus.

Molophilus (Molophilus) nielseni spec. nov. (Fig. 15)

Description (δ): Colouration largely brownish- to blackish grey. Head greyish black; antennae yellowish grey. Coxae and trochanters yellowish- to pale brownish grey; other leg segments missing. Wings suffused with greyish brown. Halteres with stem pale brownish grey and knob whitish grey.

Dimensions: Wing length 4,3 mm.

Genitalia: Hypopygium, Fig. 15.

Female unknown.

Remarks: Most similar to M. aphanta ALEX. Diagnostic characters (male): inner gonostylus simply sickle-shaped, without basal dentition or subapical enlargement; outer gonostylus bifid.

Material examined: Holotype &: Tasmania, Pelion Hut, 8.1.1991, Nielsen/Edwards (ANIC). Paratypes: Tasmania: 1&, Pelion Hut, 30.11.1990-8.1.1991, Nielsen/Edwards (ANIC); 1&, Pelion Hut, 3 km S of Mt Oakleigh, 41°50'S/146°03'E, 860 m, malaise, closed forest, 8.1.-12.1991, ANIC (ANIC).

Distribution: Tasmania.

Name: Dedication to Dr. E.S. Nielsen of Canberra who, together with Dr T. Edwards, collected the material.

Molophilus (Molophilus) orumbera spec. nov. (Fig. 16)

Description (3): Colouration largely dark greyish brown. Head grey; antennae brown, scape and pedicel markedly paler than the rest. Procoxa blackish brown, meso-and metacoxa yellowish brown; trochanters yellowish brown; remainder of midleg yellowish- to greyish brown, the tarsi darker; other leg segments missing. Wings suffused with dark greyish brown. Halteres with stem yellowish grey and knob yellow.

Dimensions: Wing length 3,5 mm.

Genitalia: Hypopygium, Fig. 16.

Female unknown.

R e m a r k s: Similar to M. reductus ALEX. Diagnostic characters (male): ventral lobe of gonocoxite short and flat; inner gonostylus without subapical tooth; outer gonostylus with only one long, pointed branch.

Material examined: Holotype &: Victoria, Gippsland, Buckland's, 19.10.1964, N. Dobrotworsky (ANIC).

Distribution: Victoria; known only from type locality.

N a m e: Orumbera is an Australian Aboriginal word for "large spear"; it refers to the shape of the pointed branch of the outer gonostylus.

Molophilus (Molophilus) rasilis ALEXANDER (Fig. 17)

Molophilus rasilis ALEXANDER, Ann. Mag. nat. Hist. (9) 19: 192 (1927).

Molophilus (Molophilus) rasilis ALEXANDER; THEISCHINGER, Stapfia 27: 53 (1992b).

Genitalia: Male hypopygium, Fig. 17.

Remarks: M. rasilis ALEX. was one of the few species of which fresh material was not available to THEISCHINGER (1992b) for the illustration of the male hypopygium. Fig. 17 should fill this gap and facilitate identification.

Material examined: 6δδ: Tasmania, Milkshake Hills Reserve, 25.2.1994, G. Theischinger (GT).

Molophilus (Molophilus) theresia spec. nov. (Fig. 18)

Description (δ): Colouration largely dark greyish brown. Head brownish black; antennae greyish brown. Pleura with three indistinct greyish yellow patches. Coxae and trochanters greyish yellow; femora pale greyish brown; tibiae dark greyish brown; tarsi and claws largely greyish- to blackish brown, the terminal two tarsal segments black. Wings strongly suffused with blackish brown. Halteres with stem yellowish grey and knob sligthly paler.

Dimensions: Wing length 5,3 mm.

Genitalia: Hypopygium, Fig. 18.

Female unknown.

R e m a r k s: Remotely similar to *M. grampianus* ALEX. and *M. tristylus* ALEX. Diagnostic characters (male): ventral lobe of gonocoxite wide, flat and not prominent; only two pairs of gonostyli; outer gonostylus tridentate.

Material examined: Holotype &: Tasmania, near summit of Hartz Mountains, 20.2.1994, G. Theischinger (ANIC).

Distribution: Tasmania; known only from type locality.

N a m e: In honour of my late mother, Mrs Theresia Maier of Linz (Austria).

Molophilus (Molophilus) thuckara spec. nov. (Fig. 19)

Description (3): Colouration largely greyish brown. Head yellowish- and blackish brown; antennae largely brown, scape and pedicel yellow. Coxae and trochanters yellowish- to greyish brown; remainder of fore- and midleg brown; other leg segments missing. Wings suffused with pale brownish grey. Halteres dull yellow, stem somewhat darker than knob.

Dimensions: Wing length 4,0 mm.

Genitalia: Hypopygium, Fig. 19.

Female unknown.

Remarks: Most similar to *M. multicurvatus* THEI. Diagnostic characters (male): inner gonostylus slightly S-curved; outer gonostylus double-branched, the inner branch stout, slightly curved, and with apex simple.

Material examined: Holotype &: New South Wales, Barrington House, 2.7.1966, N. Dobrotworsky (ANIC).

Distribution: New South Wales (SEN); known only from type locality.

N a m e: Thuckara is an Australian Aboriginal word for "river bend"; it refers to the curved inner gonostylus.

Molophilus (Molophilus) zwickorum spec. nov. (Fig. 20)

Description: Colouration largely brownish grey. Head blackish grey; antennae pale brownish grey. Legs largely pale greyish brown; a blackish brown subbasal ring in protibia of male; apex of all tibiae and tarsi slightly darker than the rest. Wings suffused with greyish brown. Halteres with stem yellowish brown and knob pale yellow.

D i m e n s i o n s: Wing length, male 3,8-4,3 mm, female 4,0-4,1 mm.

Genitalia: Male hypopygium, Fig. 20.

R e m a r k s: Most similar to *M. forceps* ALEX. Diagnostic characters (male): mesal lobe of gonocoxite sharply pointed and directed laterally, dorsal lobe sausage-shaped; inner gonostylus profoundly trifid.

Material examined: Holotype \mathcal{S} : New South Wales, Barockee area, near Ebor, 28.3.1993, G. Theischinger (ANIC). Paratypes: New South Wales: $7\mathcal{S}\mathcal{S}$, $3\mathcal{Q}\mathcal{Q}$, same data as holotype (GT); $1\mathcal{S}$, near Ebor, March 1992, G. Theischinger (GT).

Distribution: New South Wales (NEN).

N a m e: Dedication to Prof. Dr. P. and Dr. H. Zwick of Schlitz (Germany) who assisted in collecting tipulids in Australia.

Molophilus (Molophilus) plagiatus group

Molophilus (Molophilus) plagiatus group, sensu THEISCHINGER (1992b).

Molophilus (Molophilus) berigora spec. nov. (Fig. 21)

Description (3): Colouration largely grey to orange and greyish brown. Head and antennae reddish- to greyish brown. Coxae and trochanters dull yellow; remainder of legs greyish- to brownish yellow, the tarsi somewhat darker than the other segments.

Wings suffused with greyish yellow. Halteres with stem yellowish brown and knob whitish yellow.

Dimensions: Wing length 4,1-4,8 mm.

Genitalia: Hypopygium, Fig. 21.

Female unknown.

R e m a r k s: Most similar to *M. mawiliri* THEI. Diagnostic characters (male): inner gonostylus slim, double-pointed; parameres widely forked, serrate.

Material examined: Holotype &: Tasmania, Strahan, 8.2.-14.3.1977, Sedlacek (BPBM). Paratypes: 288, same data as holotype (ANIC, BPBM).

Distribution: Tasmania.

N a m e: Berigora is an Australian Aboriginal word for "orange-speckled hawk"; it refers to the colouration.

Molophilus (Molophilus) coramba spec. nov. (Fig. 22)

Description (3): Colouration largely greyish brown. Head and antennae dark greyish brown. Coxae and trochanters yellowish brown; remainder of midleg yellowish to greyish brown; other leg segments missing. Wings suffused with yellowish grey. Halteres with stem greyish brown and knob greyish yellow.

Dimensions: Wing length 5,6 mm.

Genitalia: Hypopygium, Fig. 22.

Female unknown.

R e m a r k s: Not very similar to any other described Australian species. Diagnostic characters (male): inner gonostylus long, thin, slightly S- curved, with apex dilated.

Material examined: Holotype &: New South Wales, 37 km WSW of Coramba, 26.6.1976, Z. Liepa (ANIC).

Distribution: New South Wales (NEN); known only from type locality.

N a m e: From Coramba, in north-eastern New South Wales; to be treated as a noun in apposition.

Molophilus (Molophilus) dalby spec. nov. (Fig. 23)

Description (3): Colouration largely pale to dark greyish brown. Head blackish grey; antennae greyish brown. Legs pale greyish to blackish brown; coxae and

trochanters paler than other segments. Wings suffused with greyish brown. Halteres pale greyish brown.

Dimensions: Wing length 3,3 mm.

Genitalia: Hypopygium, Fig. 23.

Female unknown.

R e m a r k s: Most similar to *M. zenta* THEI. Diagnostic characters (male): distal half of inner gonostylus smooth and evenly curved; parameres very wide and evenly rounded.

Material examined: Holotype &: Queensland, near Dalby, Kaimkillenbun, 6.12.1985, D.J. Bickel (ANIC).

Distribution: Queensland (SEQ); known only from type locality.

N a m e: From Dalby, near the type locality; to be treated as a noun in apposition.

Molophilus (Molophilus) gilvus ALEXANDER (Fig. 24)

Molophilus gilvus ALEXANDER, Ann. Mag. nat. Hist. (9) 19: 36 (1927).

Molophilus (Molophilus) gilvus ALEXANDER; THEISCHINGER, Stapfia 27: 64 (1992b) (in part).

Genitalia: Male hypopygium, Fig. 24.

R e m a r k s: As pointed out below, under *M. norrisi* sp. n., *M. norrisi* was illustrated as *M. gilvus* ALEX. by THEISCHINGER (1992b). An illustration of the male hypopygium of true *M. gilvus* is, therefore, given in this paper.

Material examined: 633: Tasmania, Strahan, 8.2.-14.3.1977, Sedlacek (BPBM).

Molophilus (Molophilus) gubara spec. nov. (Fig. 25)

Description: Colouration largely yellowish- to brownish grey. Head grey; antennae greyish yellow to greyish brown. Coxae and trochanters yellowish- to brownish grey; other leg segments missing. Wings suffused with pale brownish grey. Halteres grey, the stem darker than the knob.

D i m e n s i o n s: Wing length, male 2,5-2,8 mm, female 2,7-3,2 mm.

Genitalia: Male hypopygium, Fig. 25.

R e m a r k s: Not very similar to any other described Australian species. Diagnostic characters (male): a significant notch between strongly angulated dorsal lobe and mesal lobe of gonocoxite; inner gonostylus an almost symmetrical blade.

Material examined: Holotype ♂: Northern Territory, Kakadu National Park, Gubara Springs, Burdulba Creek, monsoon vine forest, pans, 17.1.1992, D. Bickel (AM). Paratypes: Northern Territory: 4♂♂, 2♀♀, same data as holotype (AM); 1♂, Litchfield Park, Ada Creek, at Jump Up, light trap, 24-25.6.1992, Wells and Webber (NTM).

Distribution: Northern Territory (NNT).

N a m e: From Gubara Springs, in Northern Territory; to be treated as a noun in apposition.

Molophilus (Molophilus) horakae spec. nov. (Fig. 26)

Description (3): Colouration largely pale brownish- to greyish yellow. Head brownish grey; antennae pale brownish grey. Coxae and trochanters pale greyish yellow; mesofemur and mesotibia greyish yellow with two ill-defined greyish brown rings, one at about 2/3 length and one subapical, in mesofemur; other leg segments missing. Wings suffused with pale greyish yellow. Halteres whitish- to greyish yellow.

Dimensions: Wing length 4,9 mm.

Genitalia: Hypopygium, Fig. 26.

Female unknown.

Remarks: Most similar to M. biaga THEI. and M. mackerrasi ALEX. Diagnostic characters (male): ventral lobe of gonocoxite with dorsal lump; inner gonostylus slim, with apex pointed and rather straight, subapical tooth straight and very small; parameres rather angulated.

Material examined: Holotype &: Tasmania, 43°22'S/146°08'E, Claytons, Bathurst Harbour, 17.3.1981, M. Horak (ANIC).

Distribution: Tasmania.

N a m e: Dedication to Dr M. Horak of Canberra who collected the material.

Molophilus (Molophilus) howensis spec. nov. (Fig. 27)

Description (3): Colouration largely yellowish to greyish brown. Head brownish grey; antennae greyish brown. Legs greyish yellow to greyish brown. Wings suffused with yellowish grey. Halteres with stem pale greyish brown and knob greyish yellow.

D i m e n s i o n s: Wing length 2,3-3,6 mm.

Genitalia: Hypopygium, Fig. 27.

Female unknown.

Remarks: Similar to M. fusiformis ALEX. Diagnostic characters (male): ventral lobe of gonocoxite with rather thin, pointed beak; both gonostyli long; inner gonostylus an evenly tapered, slightly arched, pointed blade with some serrations mediodistally.

Material examined: Holotype &: New South Wales, Lord Howe Island, Mount Lidgebird, foothills, creek, Dec. 1972, Z. Liepa (ANIC). Paratypes: New South Wales: 2&&, Lord Howe Island, Mount Lidgebird, foothills, Dec. 1972, Z. Liepa (ANIC); 2&&, Lord Howe Island, Mount Gower, ca 800 m, 26.11.1993, P.S. Cranston (ANIC).

Distribution: New South Wales; known only from Lord Howe Island.

N a m e: Howensis (= Latinized for "from Lord Howe Island") refers to the Distribution.

Molophilus (Molophilus) lewis spec. nov. (Fig. 28)

Description (3): Colouration largely dark yellow. Head yellow; antennae largely greyish brown, scape and pedicel greyish yellow. Thorax with most of prescutum, postscutum, mediotergite and anepimeron black. Coxae and trochanters pale to dark yellow; remainder of legs yellow. Wings suffused with pale yellow; grey clouds in basal portion and along cord. Halteres with stem pale yellow and knob black.

Dimensions: Wing length 3,8-4,0 mm.

Genitalia: Hypopygium, Fig. 28.

Female unknown.

Remarks: Most similar to *M. poecilonota* ALEX. Diagnostic characters (male): inner gonostylus slightly arched and with long, pointed side branch at about midlength.

Material examined: Holotype & : Queensland, 5-8 mi. Mount Lewis Road off Mossman-Mount Molloy Road, 22.4.1967, D.H. Colless (ANIC). Paratypes: Queensland: 1&, same data as holotype (ANIC); 1&, Bellenden Ker Range, Cable Tower 3, 1054 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (UQ).

Distribution: Queensland (NEQ).

N a m e: From Mount Lewis, in north-eastern Queensland; to be treated as a noun in apposition.

Molophilus (Molophilus) macquillani spec. nov. (Fig. 29)

Description (3): Colouration largely greyish yellow to brownish grey. Head dark brownish grey; antennae pale greyish brown. Coxae and trochanters pale greyish

yellow; remainder of legs yellowish- to dark brownish grey. Wings suffused with yellowish grey. Halteres with stem greyish yellow and knob yellowish white.

Dimensions: Wing length 3,8 mm.

Genitalia: Hypopygium, Fig. 29.

Female unknown.

R e m a r k s: Not very similar to any other described Australian species. Diagnostic characters (male): inner gonostylus long, tapered, slightly arched, with apex claw-shaped, and with a small claw-shaped, subapical side branch.

Material examined: Holotype &: Tasmania, 41°51'S/145°32'E, Mount Read, 800 m, 21.11.1988, P.B. McQuillan and E.S. Nielsen (ANIC).

Distribution: Tasmania.

N a m e: Dedication to Dr P.B. McQuillan of Hobart who, together with Dr E.S. Nielsen, collected the material.

Molophilus (Molophilus) monteithi spec. nov. (Fig. 30)

Description (3): Colouration largely pale greyish- to brownish yellow. Head and antennae whitish yellow. Legs largely dull yellow. Wings suffused with pale greyish yellow. Halteres whitish yellow. As there are slight indications of darkening near wing base and in femora, and as all available specimens appear rather immature, the colouration of the mature insect may be markedly different from the one given above.

D i m e n s i o n s: Wing length 3,0-3,3 mm.

Genitalia: Hypopygium, Fig. 30.

Female unknown.

R e m a r k s: Not very similar to any other described Australian species; a lobe on the mesal face of the male gonocoxite is also known from *M. eurygramma* ALEX., *M. iluka* THEI. and *M. vallisspei* THEI. Diagnostic characters (male): inner gonostylus forked into two long, curved branches; a small lobe on mesal face of gonocoxite.

Material examined: Holotype &: Queensland, Bellenden Ker Range, Cable Tower 3, 1054 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (QM). Paratypes: 2&&, same data as holotype (ANIC, UQ).

Distribution: Queensland (NEQ); known only from type locality.

N a m e: Dedication to Dr G. Monteith of Brisbane who gave me for study the tipulids collected by the Earthwatch Expedition of the Queensland Museum.

Molophilus (Molophilus) muggil spec. nov. (Fig. 31)

Description: Colouration largely greyish yellow to pale orange. Head greyish yellow; antennae with scape and pedicel yellow and flagellum pale greyish brown. Legs largely greyish yellow; terminal segments of tarsi and claws somewhat darker. Wings suffused with yellow. Halteres pale yellow.

D i m e n s i o n s: Wing length, male 3,0-3,6 mm, female 3,3-3,6 mm.

Genitalia: Male hypopygium, Fig. 31.

R e m a r k s: Similar to *M. gilvus* ALEX. and *M. norrisi* sp. n. Diagnostic characters (male): inner gonostylus a substantial blade with long enlarged base, tip slightly turned medially; in most specimens, near the tip, a ventral tooth which cannot be seen from dorsal aspect; parameres rather elongate and not parallel sided.

Material examined: Holotype &: Queensland, Bellenden Ker Range, Cable Tower 3, 1054 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (QM). Paratypes: Queensland: 3&&, 4&&, same data as holotype (ANIC, UQ); 1&, Bellenden Ker Range, Summit TV Stn, 1560 m, rainforest, malaise trap, 17.10.-5.11.1981, Earthwatch/Queensland Museum (UQ).

Distribution: Queensland (NEQ); known only from Bellenden Ker Range.

N a m e: Muggil is an Australian Aboriginal word for "stone knife"; it refers to the shape of the inner gonostylus.

Molophilus (Molophilus) neecoo spec. nov. (Fig. 32)

Description (3): Colouration largely greyish brown. Head brownish grey; antennae pale greyish brown. Legs pale to dark greyish brown. Wings suffused with greyish brown. Halteres pale greyish brown.

Dimensions: Wing length 3.1 mm.

Genitalia: Hypopygium, Fig. 32.

Female unknown.

Remarks: Most similar to M. arcuarius ALEX. and M. bogongensis ALEX. Diagnostic characters (male): inner gonostylus strongly bent and pointed; parameres oval.

Material examined: Holotype &: New South Wales, Fitzroy Falls, 2500 ft, 21.10.1966, N. Dobrotworsky (ANIC).

Distribution: New South Wales (SEN).

N a m e: Neecoo is an Australian Aboriginal word for "elbow"; it refers to the strongly bent inner gonostylus.

Molophilus (Molophilus) norrisi spec. nov. (Fig. 33)

Molophilus (Molophilus) gilvus ALEXANDER; THEISCHINGER, Stapfia 27: 64 (1992b) (in part).

Description (3): Colouration largely yellowish- to greyish brown. Head grey; antennae yellowish grey. Coxae and trochanters greyish yellow; other leg segments missing. Wings suffused with greyish yellow. Halteres largely pale greyish brown.

Dimensions: Wing length 3,9 mm.

Genitalia: Hypopygium, Fig. 33.

Female unknown.

R e m a r k s: As pointed out above, under *M. gilvus* ALEX., *M. norrisi* sp. n. was illustrated as *M. gilvus* by THEISCHINGER (1992b). M. norrisi is similar to *M. gilvus* and *M. muggil* sp. n. Diagnostic characters (male): inner gonostylus a basaly enlarged, sightly arched blade; parameres rather narow and parallel sided.

Material examined: Holotype &: Tasmania, Port Arthur, 11.11.1975, K.R. Norris (ANIC).

Distribution: Tasmania.

N a m e: Dedication to Dr K.R. Norris of Canberra who collected the material.

Molophilus (Molophilus) puthawing spec. nov. (Fig. 34)

Description (3): Colouration largely yellowish- to reddish brown. Head and antennae pale greyish brown. Legs greyish yellow to pale greyish brown. Wings suffused with pale yellowish grey. Halteres greyish yellow.

D i m e n s i o n s: Wing length 4,4 mm.

Genitalia: Hypopygium, Fig. 34.

Female unknown.

Remarks: Most similar to *M. erricha* THEI. Diagnostic characters (male): inner gonostylus evenly tapered, slightly arched, with short straight subapical tooth; parameres apparently slightly bilobed.

Material examined: Holotype &: New South Wales, Termeil, 22.10.1966, N. Dobrotworsky (ANIC).

Distribution: New South Wales (SEN); known only from the type locality.

N a m e: Puthawing is an Australian Aboriginal word for "lower arm"; it refers to the shape of the inner gonostylus.

Molophilus (Molophilus) ugundyi spec. nov. (Fig. 35)

Description: Colouration largely pale yellow to greyish brown. Head pale yellow; antennae pale to greyish yellow. Coxae and trochanters pale yellow; femora pale yellow in basal half, distal half whitish yellow, a greyish brown ring beyond midlength and another before apex; tibiae yellowish white with blackish brown subbasal and apical ring; tarsi yellowish grey to greyish brown, the more proximal segments much paler basally than apically; claws blackish brown. Wings suffused with pale greyish yellow; a large blackish brown mark or a combination of smaller marks at about level of arculus. Halteres greyish white.

Dimensions: Wing length, male 2,6-3,1 mm, female 3,0-3,5 mm.

Genitalia: Male hypopygium, Fig. 35.

R e m a r k s: Most similar to *M. macalpinei* THEL Diagnostic characters (male): inner gonostylus strongly arched, its base enlarged, a ventral tooth near apex.

Material examined: Holotype ♂: Northern Territory, Litchfield Park, Ada Creek, at Jump Up, light trap, 24-25.6.1992, Wells and Webber (ANIC). Paratypes: Northern Territory: 5♂♂, 4♀♀, same data as holotype (ANIC, NTM); 1♂, 48 mi. SW of Daly River, 14°11'S/130°08'E, 19.8.1968, M. Mendum (ANIC). Western Australia; 1♂, 14°49'S/126°49'E, Carson escarpement, 9-15.8.1975, I.F.B. Common and M.S. Upton (ANIC).

Distribution: Northern Territory (NNT), Western Australia (KIM).

N a m e: Ugundyi is an Australian Aboriginal word for "crab"; it refers to the claw-shaped inner gonostylus.

Molophilus (Molophilus) upjohni spec. nov. (Fig. 36)

Description: Head largely greyish yellow, including rostrum and scape; palps, flagellum and particularly pedicel, markedly darker, greyish brown. Thorax greyish yellow to pale reddish- or greyish brown, terga slightly darker than pleura. Legs greyish yellow, only apex of tibiae and of tarsal segments 1-4 conspicuously darkened. Wing venation greyish yellow to yellowish brown; membrane hyaline, slightly suffused with brownish yellow. Halteres greyish yellow. Abdomen largely greyish yellow; female with cerci and hypogynial valves brown.

Dimensions: Wing length, male 2,2-2,6 mm, female 2,2-2,6 mm.

Genitalia: Male hypopygium, Fig. 36.

Remarks: Most similar to *M. ternatus* ALEX. Diagnostic characters (male): shape and structure of inner gonostylus (arched, trifid).

Material examined: Holotype δ: Queensland, Cape Tribulation, Earthwatch Australia (ANIC). Paratypes: 3 δ δ, 7 Q Q, same data as holotype (ANIC, GT).

Distribution: Queensland (NEQ); known only from Daintree rainforest.

N a m e: Dedication to Mr Bill Upjohn, of Uralla, driving force for the field work of several Earthwatch expeditions in Australia.

Subgenus Superbomolophilus THEISCHINGER

Synonymy as in THEISCHINGER (1992b).

Molophilus (Superbomolophilus) osterhas spec. nov. (Fig. 37)

Description (3): Colouration largely greyish- to blackish brown. Head black; antennae with scape and pedicel greyish brown and flagellum brown. Coxae and trochanters greyish brown, other leg segments missing. Wings strongly suffused with blackish brown. Halteres pale greyish brown.

Dimensions: Wing length 4,5 mm.

Genitalia: Hypopygium, Fig. 37.

Female unknown.

Remarks: Similar to M. cooloola THEI. Diagnostic characters (male): posterior lobes of tergite 9 large; inner gonostylus with large lateral branch and trifid apex.

Material examined: Holotype &: Victoria, Mount Buffalo National Park, ca 20 km SE Myrtleford, 875 m, Euc/Noth/Acacia forest, malaise trap/FIT, 5-13.12.1990, D. Pollock, L. Reichert (ANIC).

Distribution: Victoria; known only from type locality.

N a m e: Osterhas is an arbitrary combination of letters; to be treated as a noun in apposition.

References

ALEXANDER C.P. (1927): New or little-known Tipulidae (Diptera). XXXIII. Australasian species. — Ann. Mag. nat. Hist. (9) 19: 16-38.

ALEXANDER C.P. (1928): Crane-flies (Tipulidae, Diptera) from Barrington Tops, New South Wales. — Proc. Linn. Soc. N.S.W. 53: 51-70.

- ALEXANDER C.P. (1929): New or little-known Tipulidae (Diptera). XLII. Australasian species. Ann. Mag. nat. Hist. (10) 3: 327-346.
- ALEXANDER C.P. (1934): Notes on the Australian species of *Molophilus* (Tipulidae, Diptera). II. Proc. Linn. Soc. N.S.W. **59**: 179-189.
- SKUSE A.A. (1890): Diptera of Australia. Part VII. The Tipulidae Brevipalpi. —Proc. Linn. Soc. N.S.W. 4: 757-892.
- THEISCHINGER G. (1992a): The Limoniinae (Diptera: Tipulidae) of Australia. I. Introduction, Methods, Identification. Stapfia 27: 1-4.
- THEISCHINGER G. (1992b): The Limoniinae (Diptera: Tipulidae) of Australia. II. The genus *Molophilus* CURTIS. Stapfia 27: 5-150.
- THEISCHINGER G. (1993): The Limoniinae (Diptera: Tipulidae) of Australia. III. The genus Gynoplistia MACQUART. Stapfia 29: 1-106.

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Species Index

This alphabetical list includes all species and subspecies of *Gynoplistia* MACQUART and *Molophilus* CURTIS as treated in the present paper. Reference to the next higher taxon (subgenus or species group) or artificial unit as used in the paper is given by the following abbreviations:

Aus Austromolophilus THEI., 6

Gal Gynoplistia (Gynoplistia) alice group, 2

Gau Gynoplistia (Gynoplistia) aurantiocincta group, 3

Gfu Gynoplistia (Gynoplistia) fumipennis group, 4

Ghow Gynoplistia (Gynoplistia) howensis group, 5

icG insufficiently clarified species of Gynoplistia (Gynoplistia), 5

Mgr Molophilus (Molophilus) gracilis group, 10

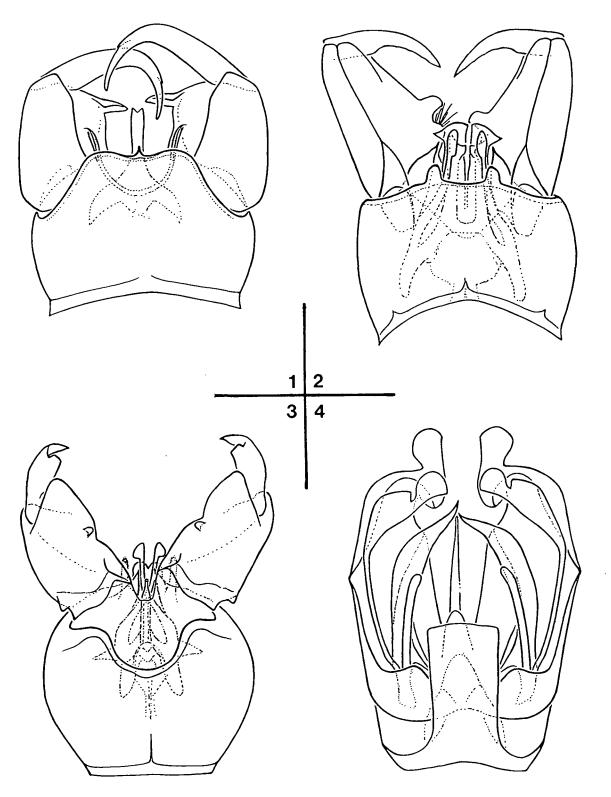
Mpl Molophilus (Molophilus) plagiatus group, 15

Sup Superbomolophilus THEI., 24

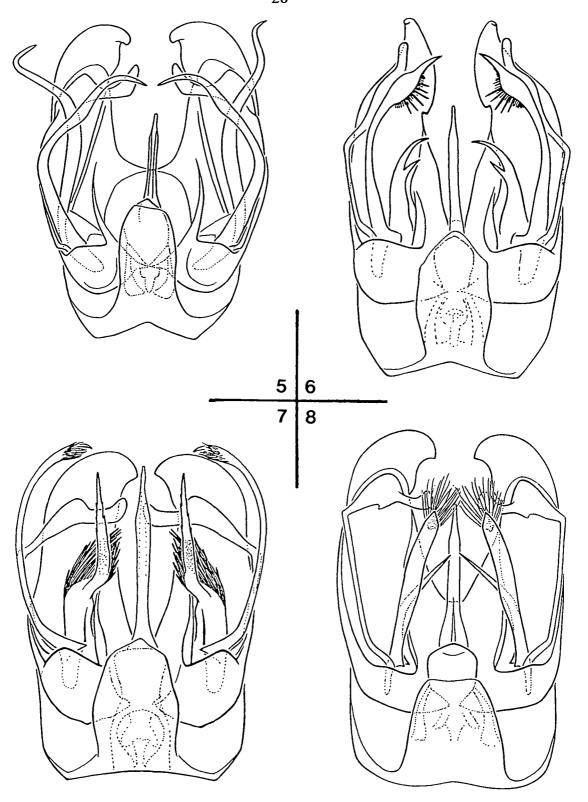
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berberus sp. n., Mgr, 11, 10 berigora sp. n., Mpl, 21, 15 collessi sp. n., icG, 5 coramba sp. n., Mpl, 22, 16 dalby sp. n., Mpl, 23, 16 drepanostylus ALEX., Mgr, 12, 11 eurygramma ALEX., Mgr, 13, 11 gilvus ALEX., Mpl, 24, 17 gubara sp. n., Mpl, 25, 17 horakae sp. n., Mpl, 26, 18 howensis SKUSE, Ghow, 3, 5 howensis sp. n., Mpl, 27, 18 iyouta sp. n., Mgr, 14, 12 laoonana sp. n., Aus, 4, 6 lewis sp. n., Mpl, 28, 19 kitchingi sp. n., Aus, 5, 7 kulai sp. n., Aus, 6, 7 macquillani sp. n., Mpl, 29, 19 monteithi sp. n., Mpl, 30, 20 muggil sp. n., Mpl, 31, 21 neecoo sp. n., Mpl, 32, 21

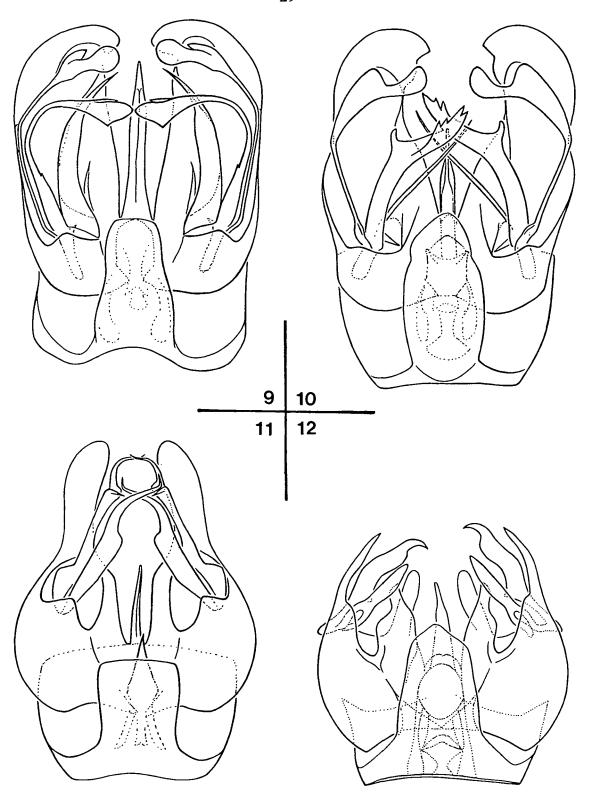
ngernka sp. n., Aus, 7, 8 nglaive sp. n., Aus, 8, 9 nielseni sp. n., Mgr, 15, 12 norrisi sp. n., Mpl, 33, 22 orumbera sp. n., Mgr, 16, 13 osterhas sp. n., Sup, 37, 24 pammelas ALEX. (= variabilis ALEX. ssp.), Gfu, 4 puthawing sp. n., Mpl, 34, 22 rasilis ALEX., Mgr, 17, 13 spetai sp. n., Aus, 9, 9 theresia sp. n., Mgr, 18, 14 thuckara sp. n., Mgr, 19, 14 tigris sp. n., Gau, 2, 3 ugundyi sp. n., Mpl, 35, 23 upjohni sp. n., Mpl, 36, 23 variabilis ALEX., Gfu, 4 weiri sp. n., Gal, 1, 2 wieseri sp. n., Aus, 10, 10 zwickorum sp. n., Mgr, 20, 15



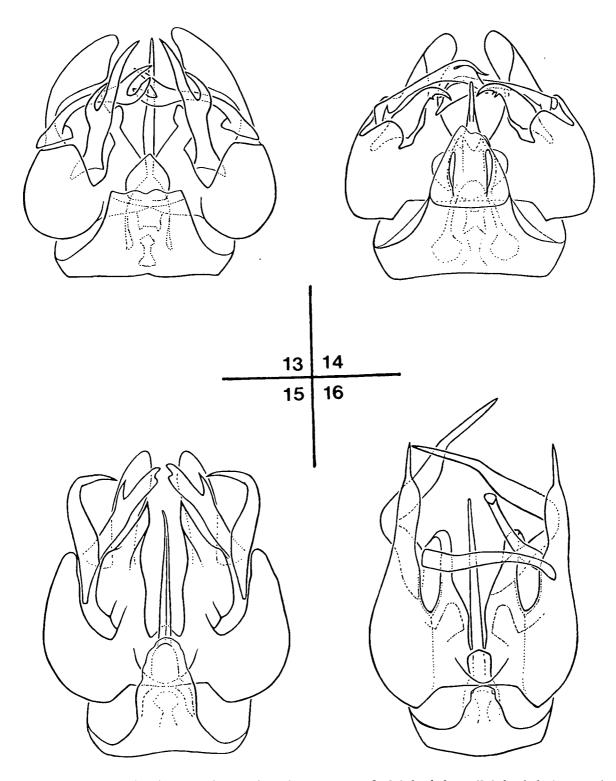
Figs 1-4: Male hypopygium of: 1, Gynoplistia (Gynoplistia) weiri sp. n., dorsal aspect; 2: G. (G.) tigris sp. n., dorsal aspect; 3: G. (G.) howensis SKUSE, ventral aspect; 4: Molophilus (Austromolophilus) laoonana sp. n., dorsal aspect.



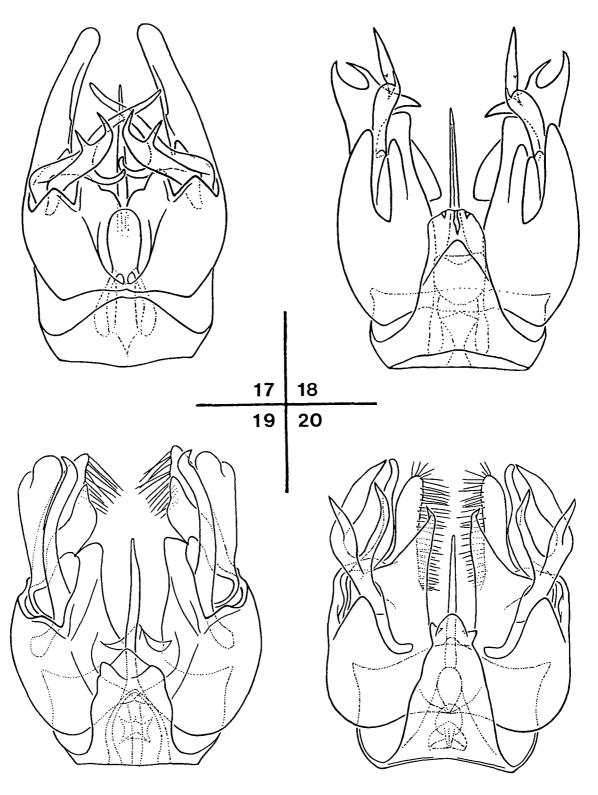
Figs 5-8: Male hypopygium, dorsal aspect, of *Molophilus* (Austromolophilus) species: 5: kitchingi sp. n.; 6: kulai sp. n.; 7: ngernka sp. n.; 8: nglaiye sp. n.



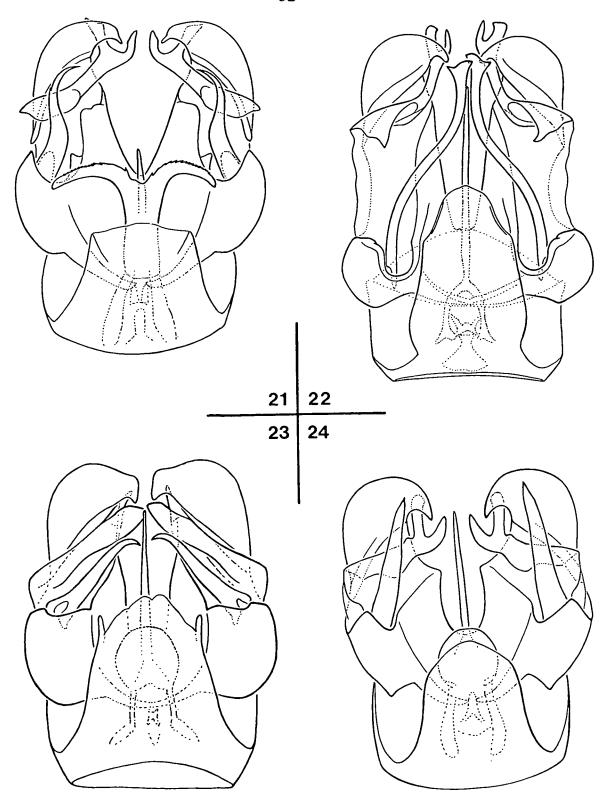
Figs 9-12: Male hypopygium, dorsal aspect, of *Molophilus* species: 9: M. (Austromolophilus) spetai sp. n.; 10: M. (A.) wieseri sp. n.; 11: M. (Molophilus) berberus sp. n.; 12: M. (M.) drepanostylus ALEX.



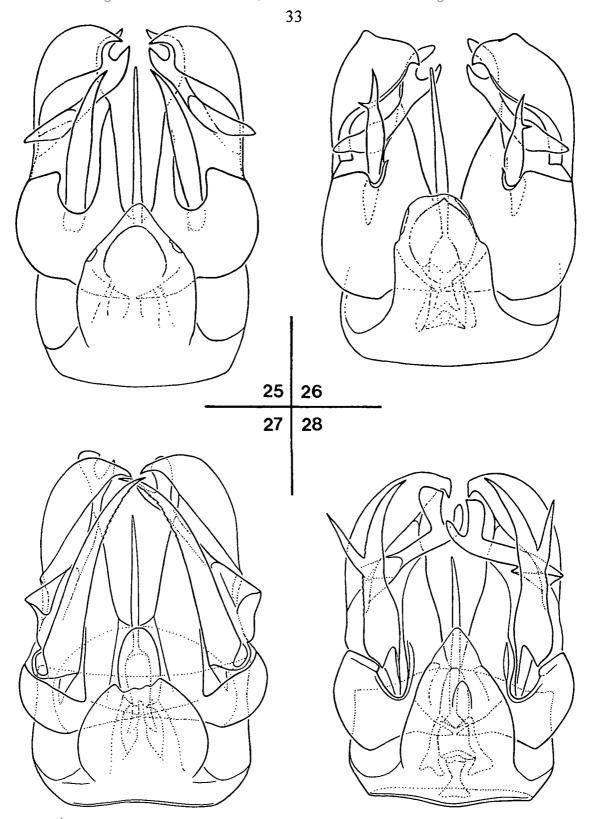
Figs 13-16: Male hypopygium, dorsal aspect, of *Molophilus* (*Molophilus*) species: 13: eurygramma ALEX.; 14: iyouta sp. n.; 15: nielseni sp. n.; 16: orumbera sp. n.



Figs 17-20: Male hypopygium, dorsal aspect, of *Molophilus* (*Molophilus*) species: 17: rasilis ALEX.; 18: theresia sp. n.; 19: thuckara sp. n.; 20: zwickorum sp. n.

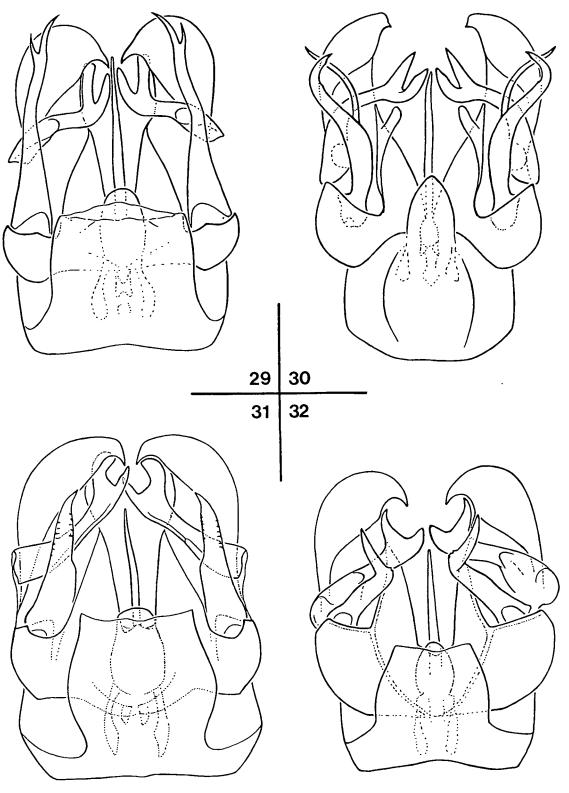


Figs 21-24: Male hypopygium, dorsal aspect, of *Molophilus* (*Molophilus*) species: 21: berigora sp. n.; 22: coramba sp. n.; 23: dalby sp. n.; 24: gilvus ALEX.

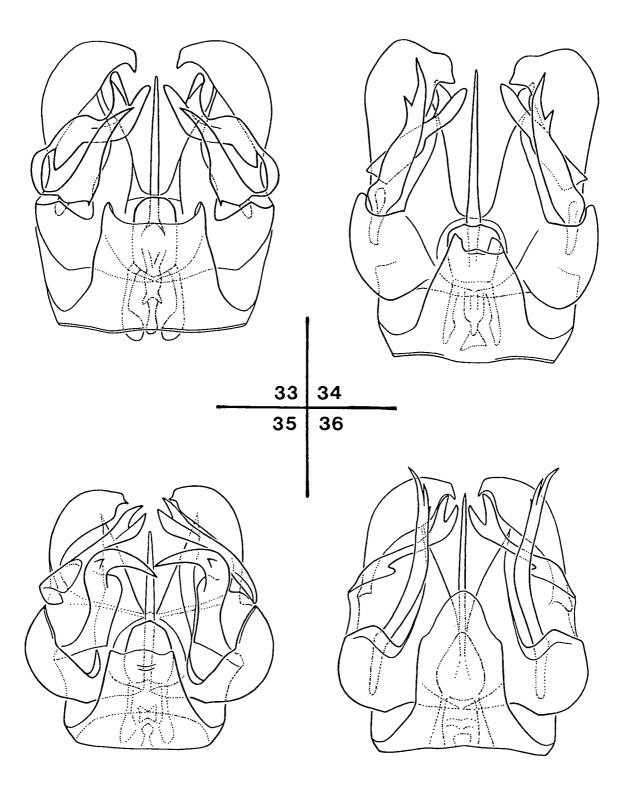


Figs 25-28: Male hypopygium, dorsal aspect, of *Molophilus (Molphilus)* species: 25: gubara sp. n.; 26: horakae sp. n.; 27: howensis sp. n.; 28: lewis sp. n.

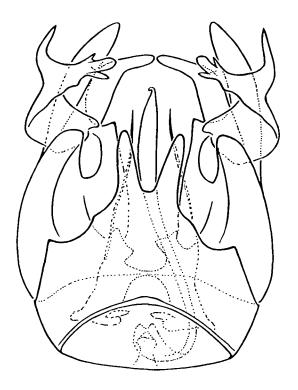




Figs 29-32: Male hypopygium, dorsal aspect, of *Molophilus* (*Molophilus*) species: 29: macquillani sp. n.; 30: monteithi sp. n.; 31: muggil sp. n.; 32: neecoo sp. n.



Figs 33-36: Male hypopygium, dorsal aspect, of *Molophilus* (*Molophilus*) species: 33: norrisi sp. n.; 34: puthawing sp. n.; 35: ugundyi sp. n.; 36: upjohni sp. n.



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Fig. 37: Male hypopygium, dorsal aspect, of Molophilus (Superbomolophilus) osterhas sp. n.